

**ABSTRACT**

A microelectronic package comprises microelectronic assemblies and a housing having a cylindrical outer wall. The microelectronic assemblies include electronic components mounted on a substrate and are affixed to support surfaces of the inner wall of the housing. The housing is preferably formed of semi-cylindrical sections that are joined along axial edges. The housing includes one or more axial channels interposed between the outer wall and the inner wall for conveying coolant gas. In this manner, the housing provides more uniform thermal dissipation of heat generated by the microelectronic assemblies during operation, despite variations in the thickness between the cylindrical outer wall and the support surfaces, which are preferably planar.